

## REMARKS

### *Status of the Claims*

Claims 6-8 are currently pending. Claims 1-5 have been cancelled.

### *Claim Amendments*

Claims 6-8 have been amended. Specifically, claim 6 has been amended to recite to “at least two messenger ribonucleic acid (mRNA) molecules” and “at least two polypeptides”. Claim 7 has been amended to be made consistent with the amendments to claim 6. Claim 8 has been amended to recite “at least two mRNA molecules” and “at least two translation products”. Support for these amendments can be found in Example 10. No new matter has been added as a result of these amendments.

### *Rejection of Claims 6-8 Under 35 U.S.C. Section 102(e)*

Claims 6-8 are rejected under 35 U.S.C. Section 102(e) as being anticipated by U.S. Patent Publication 2002/0009738 (hereinafter the “’738 application”). According to the Examiner, the ‘738 application discloses BS106 (SEQ ID NO:8) and BU101 (SEQ ID NO:6) as sequences 31 and 77 respectively. According to the Examiner, these molecules are tumor proteins and the proteins, as well as mRNA encoding said proteins are detected in diagnostic methods (the Examiner points to the abstract). Applicants respectfully traverse the rejection.

A rejection for anticipation under section 102 requires that each and every limitation of the claimed invention be disclosed in a single prior art reference. Claims 6-8 have been amended to refer to a method of detecting breast cancer in a patient that involves obtaining a test sample from a patient, isolating at least two mRNA molecules from said test sample, wherein translation of said at least two mRNA molecules results in the production of at least two polypeptides selected from the group consisting of mammaglobin (SEQ ID NO:5), BU101 (SEQ ID NO:6) and BS106 (SEQ ID NO:8) and either (1) creating cDNA molecules from these at least two mRNA molecules and detecting the presence of said cDNA molecules, the presence of which indicates the presence of breast cancer (claims 6 and 7) or (2) detecting a translation product of said at least two mRNA molecules, wherein the presence of at least two translation products selected from this group indicates the presence of breast cancer (claim 8). Applicants submit that the ‘738 application does not specifically disclose or suggest such methods. Specifically, the ‘738 application does not disclose or suggest a method of detecting breast cancer in a patient based on detecting the presence of at least two mRNA molecules which produce at least two polypeptides or translation products selected from the group consisting of mammaglobin (SEQ ID NO:5), BU101 (SEQ ID NO:6) and BS106 (SEQ ID NO:8). As discussed in

Example 10, Applicants have surprisingly discovered that the expression of one or more of these markers is present in virtually all primary breast cancers. Therefore, Applicants submit that this rejection has now been moot and should be withdrawn.

Claims 6-8 are also rejected under 35 U.S.C. Section 102(e) as being anticipated by U.S. Patent Publication 2002/0082215 (herein the “ ‘215 application”). According to the Examiner, the ‘216 application discloses mammaglobin (SEQ ID NO:5) which is the same as sequence 27. The Examiner says that the ‘215 application discloses methods for detecting RNA encoding mammaglobin and the detection of breast cancer (The Examiner points to the abstract). Applicants respectfully traverse the rejection.

As mentioned above, a rejection for anticipation under section 102 requires that each and every limitation of the claimed invention be disclosed in a single prior art reference. As also mentioned above, claims 6-8 have been amended to refer to a method of detecting breast cancer in a patient that involves obtaining a test sample from a patient, isolating at least two mRNA molecules from said test sample, wherein translation of said at least two mRNA molecules results in the production of at least two polypeptides selected from the group consisting of mammaglobin (SEQ ID NO:5), BU101 (SEQ ID NO:6) and BS106 (SEQ ID NO:8) and either (1) creating cDNA molecules from these at least two mRNA molecules and detecting the presence of said cDNA molecules, the presence of which indicates the presence of breast cancer (claims 6 and 7) or (2) detecting a translation product of said at least two mRNA molecules, wherein the presence of at least two translation products selected from this group indicates the presence of breast cancer (claim 8). Applicants submit that the ‘215 application does not specifically disclose or suggest such methods. Specifically, the ‘215 application does not disclose or suggest a method of detecting breast cancer in a patient based on detecting the presence of at least two mRNA molecules which produce at least two polypeptides or translation products selected from the group consisting of mammaglobin (SEQ ID NO:5), BU101 (SEQ ID NO:6) and BS106 (SEQ ID NO:8). As mentioned above in connection with the 35 U.S.C. Section 102(e) rejection in view of the ‘738 application, in Example 10, Applicants have surprisingly discovered that the expression of one or more of these markers is present in virtually all primary breast cancers. Therefore, Applicants submit that this rejection has now been moot and should be withdrawn.

### REQUEST FOR RECONSIDERATION

Reconsideration and withdrawal of all claim rejections are respectfully requested. Applicants believe that the present application is in condition for allowance. Should the Examiner have any questions or would like to discuss any matters in connection with the present application, the Examiner is invited to contact the undersigned at

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